RA 9003, THE ECOLOGICAL SOLID WASTE MANAGEMENT ACT, A DISSECTION INTO POLICY IMPLEMENTATION ISSUES

A. INTRODUCTION

President Gloria Macapagal-Arroyo signed Republic Act No.9003 into law on 26 January 2001. It is the first bill enacted immediately after EDSA 2. Short-titled **Ecological Solid Waste Management Act of 2000**, it is by far the most comprehensive piece of legislation to address the country's garbage problem.

This dissection of the Ecological Waste Management Act into implementation issues seeks to present a basic understanding of RA 9003 and identify as well as anticipate possible choke points that may arise in the implementation of the law. There is also a need to look at the importance of ensuring fund allocation for its implementation and possible future scenarios. This paper recognizes that effective implementation of the law needs to proceed beyond the ideal circumstances. If not, an end result would be a perpetuation of the problems it sought to address. It seeks not to duplicate the implementation problems encountered by another landmark law – the Clean Air Act.

Last year, Metro Manila generated an estimate of 5,948 tons of solid waste per day. Within five (5) years after the effectivity of RA 9003, approximately 1,500 tons should be diverted from simply disposable to recycled, re-used or compost products. A World Bank-funded study discovered that as early as 1982, despite a lower volume of waste, 1,839 tons could possibly be recovered.

Solid waste management whose importance is directly related to public health, resource management and utilization, and maintaining a clean environment, is necessary in ensuring human development. Solid waste management benefits the population in many ways.

B. What are our wastes? Is RA 9003 comprehensive enough?

The law specifically declares in Sec. 2 that it is the policy of the state to adopt a systematic, comprehensive and ecological solid waste management system. To understand the essence of this system, it would be necessary to identify: 1) solid wastes and how the law classifies these, and 2) the limitations of the law. The following are the types of wastes identified by RA 9003:

1. Solid Wastes – all discarded household, commercial wastes, non-hazardous institutional and industrial wastes, street sweepings, construction debris, agricultural wastes, and other non-hazardous/non-toxic solid wastes.

2. Special Wastes – these are household hazardous wastes such as paints, thinners, household batteries, lead-acid batteries, spray canisters, and the like. These include wastes from residential and commercial sources that comprise of bulky wastes, consumer electronics, white goods, yard wastes that are collected separately, oil, and tires. These wastes are usually handled separately from other residential and commercial wastes.
3. Hazardous Wastes – these are solid, liquid, contained gaseous or semisolid wastes which may cause or contribute to the increase in mortality, or in serious or incapacitating reversible illness, or acute/chronic effect on the health of people and other organisms.
4. Infectious Wastes – mostly generated by hospitals.
5. Wastes resulting from mining activities including contaminated soil and debris.

With these classifications, RA 9003 is seen to be comprehensive enough in taking action on solid wastes and to some extent special wastes as outlined in the preceding list. The law, however, does not provide exact treatment and absolute management of hazardous waste, infectious wastes or wastes resulting from mining activities.

C. Solid Waste Management System of RA 9003

The paradigm of RA 9003 is “waste is resource that can be recovered”, emphasizing recycling, re-use and composting as methods to minimize and eventually manage the waste problem as diagrammed in Chart 1 below.

The flow indicates that solid waste management starts at the point where people learn how to conserve the resources available, thus promoting sustainable development. *(Brundtland, 1987)*

Awareness on how to conserve resources, as first step, is expected to reduce the volume of waste generated whether at the industrial level or household and commercial levels. This first step will require extensive education to change the values of the people.

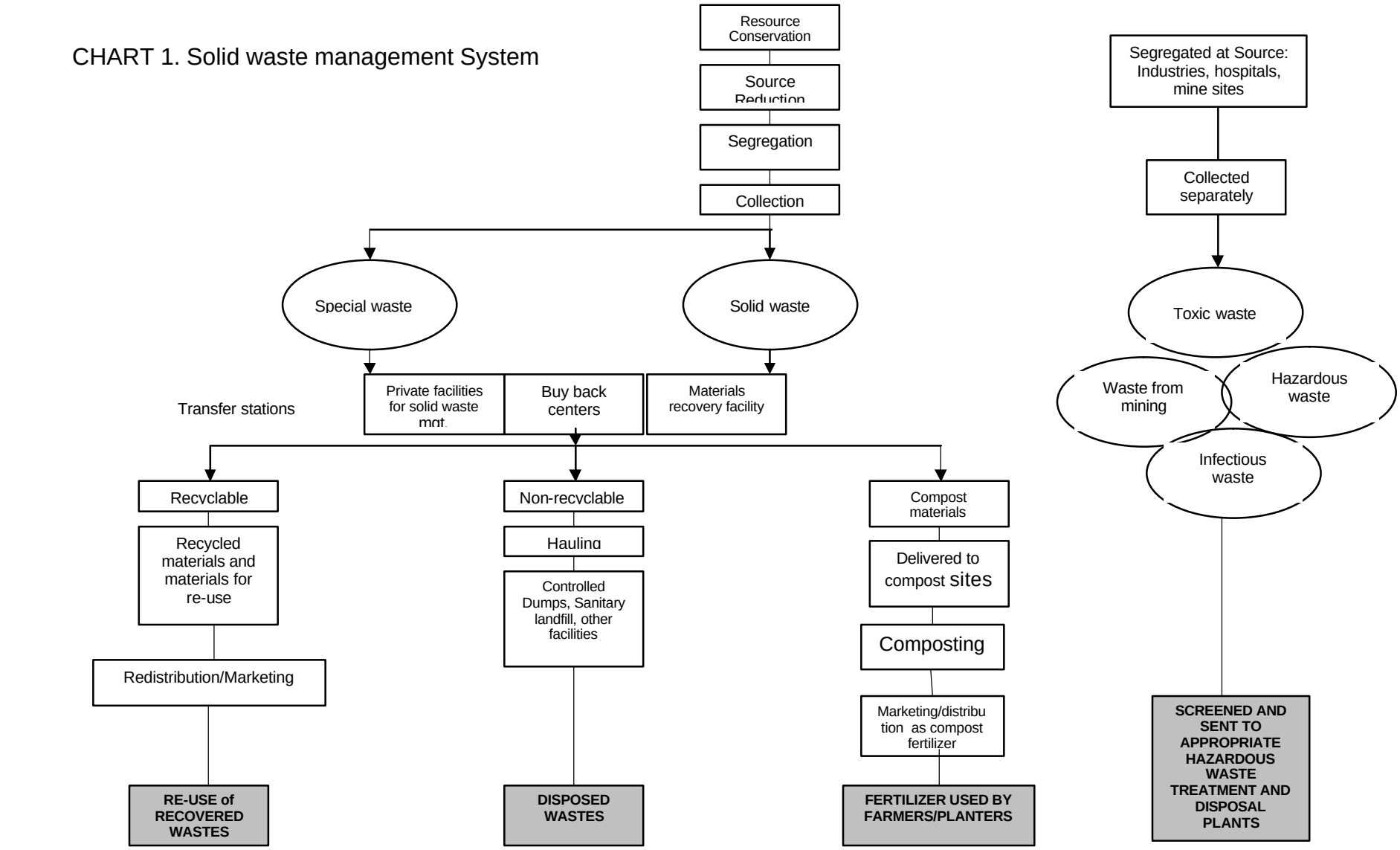
In another study by Norcunsult in 1982 showed that half of the total solid wastes generated come from households. Upon segregation, wastes are supposed to be collected by LGUs, which are expected to implement 100% collection efficiency. Recyclable wastes are to be hauled and moved to stations where they shall be temporarily stored, separated, converted, or simply transferred to larger vehicles for transport.

RA 9003 identifies the following as transfer stations: buy-back centers, the materials recovery facilities, and other waste management facilities that may be developed in the future. Food, yard, and agricultural wastes shall be processed through composting and eventually distributed or used as organic

fertilizers. Non-recyclable wastes shall be disposed of in sanitary landfills, controlled dumps or other waste management facilities.

Throughout this system, the use of new and appropriate technology will be significant. This responsibility is vested upon the National Ecology Center. For one, the technology for recycling should not incur more costs than benefits in terms of income or usefulness of the recycled product, and must be of comparable quality to existing products. Another would be the shift from the use of inorganic to organic fertilizers. However, this usually affects crop yield negatively, thus it is often unacceptable to poor and marginalized farmers who comprise a large majority of the population.

CHART 1. Solid waste management System



Sec. 20 …. Within five (5) years after the effectivity of this Act, the LGU shall divert at least 25% of all solid waste from all waste disposal facilities through re-use, recycling, and composting activities and other resource recovery activities and an increase every three (3) years.

Toxic Wastes, Hazardous Wastes, Infectious Wastes and other Wastes (THWs) are recognized by the Act in subsection (j) of Sec. 17 *(The components of the Local Government Solid Waste Management Plan)*, Sec. 19 *(Waste Characterization),* and Sec. 28 *(Reclamation Programs and Buy-back Centers for Recyclables and Toxics).*

But after determining the wastes' recyclability or non-recyclability, hazards and toxicity, the Act relegates the rest of the concern to the provisions of RA 6969. On the other hand, RA 6969 speaks of 1) regulating, restricting or prohibiting the importation, manufacture, processing, sale, distribution, use and disposal of chemical substances and mixtures that pose unreasonable risk and/or injury to health or the environment; and 2) prohibiting the entry or even transit of hazardous and nuclear wastes, including their disposal within Philippine territorial limits.

The measure does not clearly provide the specifics on how and where to dispose wastes being generated domestically by the local industry and hospitals. Apart from 177 hospitals and industries using incinerators that are now banned in compliance with the Clean Air Act, what do we do with the wastes generated by clinics, medical facilities, manufacturing industries, and even special wastes generated by households, which comprise 1-2% of the wastes?

Management of toxic, hazardous and infectious wastes is a crucial step in preventing the potent dangers these wastes may inflict on human life. Clearly a policy for its implementation must be enacted. Appropriate technology distinct from ordinary solid waste management is necessary and should be established as a solution. As a concrete suggestion, substances or raw materials used in manufacturing that result to these wastes must be banned.

D. Implementation: The Executive Branch Must Act

RA 9003 specifically directs the first step of implementation. If the intent and objectives of the law are to be achieved, the initial activities and output (Table 1) should be acted upon immediately. Although the implementing rules and regulations (IRR) may not have been drafted and promulgated, there already are targeted outputs that have to be accomplished (Table 1, Nos. 1-7). Without an approved IRR, these activities will not be implemented and thus, will cause further delays. The same thing happened to RA 8505, (The Rape Victim Assistance and Protection Act of 1998). Without an IRR, no Rape Crisis Center (RCC) has been set up two years after the passage of the law.

As of 28 March 2001, former Rep. Heherson Alvarez has been appointed Secretary of the Department of Environment and Natural Resources (DENR). It is hopeful that with continued advocacy, the new secretary could immediately attend to the creation of the National Solid Waste Management Commission from where the law's implementation shall

actually emanate. The Commission will be an inter-agency body headed by the DENR. The Environmental Management Bureau will serve as secretariat. There will be marginal representation from civil society, the recycling industry, and the manufacturing and packaging industries.

Setting the stage for solid waste management in the country will depend largely on the DENR for the IRR, the Commission that will lay the framework, the LGUs for execution, and other public and private institutions that would encourage and sustain public participation.

Table 1. Immediate Actions Necessary for RA 9003

ACTIONS AND OUTPUTS	PERIOD ACCOMPLISHED	DESCRIPTION	AGENCY RESPONSIBLE
1. Submission of data by concerned agencies	Within three (3) mos. after effectivity	These are data that will be used for drafting the national solid waste management status report.	DENR, DOH and other concerned agencies
2. A National Solid Waste Management Status Report	Within six (6) mos. after effectivity	This status report shall be the basis for the formulation of the National Solid Waste Management Framework.	DENR, DOH and other concerned agencies
3. A National Solid Waste Management Framework	Within six (6) mos. after the completion of the status report	Describes the operational parameters for the implementation of solid waste management.	National Solid Waste Management Commission
4. Published Guidelines for Identification of Common Solid Waste Management Problems	Not later than six (6) mos. after the effectivity of this Act	This is to encourage and facilitate the development of government plans for solid waste management.	National Solid Waste Management Commission
5. Inventory of Existing Markets for Recyclable Materials	Within six (6) mos. after effectivity	This seeks to respond to the need for immediate use of recycled materials so that these are not left stored and unused.	Department of Trade and Industry (DTI)
6. Inventory of Markets for Composts	Within six (6) mos. after effectivity	Markets for compost are distributors and end-users of compost fertilizers. These will be very important provided that composting is seriously undertaken by the majority of citizens in an	Department of Agriculture

		agricultural country such as the Philippines.	
7. Inventory of Waste Disposal Facilities	Within six (6) mos. after effectivity	This will be undertaken to identify facilities for waste disposal, its intent may also be related to the targets in Sec. 20 on waste diversion.	DENR, DOH, and DILG
8. Promulgation of the Implementing Rules and Regulations (IRR)	Within one (1) year after its enactment	The IRR guides the implementation of the law.	DENR, Committees on Ecology of Senate and House, Leagues, MMDA and other concerned agencies
9. Preparation of a list of Non-environmentally Acceptable Products	Within one (1) year after the effectivity	This list enumerates the products that must be excluded from the market provided that alternatives are found and that the cost is not greater than 10% of the replaced product.	National Solid Waste Management Commission
10. Method and procedure for eventual closure of existing open dumps and/or sanitary landfills located within aquifers, groundwater reservoirs or water shed areas	Eighteen (18) mos. after effectivity	A time bound sub-topic of the solid waste management framework to protect our water resources	National Solid Waste Management Commission
11. Development of a Ten (10)-Year Local Government Solid Waste Management Plan	Not specified	A plan to implement solid waste management at the local government level	LGUs
12. Establishment of	Not Specified	This facility must be	Barangays or

a Materials Recovery Facility (MRF)		established in every barangay, or a cluster of barangays. This facility will receive mixed waste for final sorting, segregation, recycling and composting.	Cluster of Barangays with LGUs
13. Requirements for Eco-Labeling	Not Specified	Eco-labeling shall instruct users on the recyclable value of the product.	Department of Trade and Industry (DTI)

E. Interventions and Institutional Mechanisms Leading to Changed Values

RA 9003 then poses a challenge. Though the mechanisms and processes leading to a systematic implementation are sufficiently discussed, there is a seething gap on how to effectively change the "people's throwing-away and non-segregating behavioral pattern and the burning, dumping, and back-end practices for disposal". The challenge is to change these to patterns of resource conservation, segregation, re-use, recycling, and composting. This shift is basically attitudinal and culture-based and such task may be realized by a confluence of efforts.

Information and education of the people is an instantaneous reply. According to RA 9003, this task is delegated to civil society and NGOs. However, for a population of 76 Million Filipinos, this is a huge task. The initial step is to educate the implementors of the law – the LGUs. In addition to this, solid waste management in the curricula of schools would enhance awareness and promote the right attitudes of the youth.

An effective and genuine enforcement of the prohibitions and penalties of RA 9003 and other related laws will also deter a portion up to a large part of the population in mindlessly throwing away and non-segregating wastes. This has been evident in local governments who have trail-blazed the path of discipline. These LGUs passed ordinances such as 1) Ordinance No. 105 of Bacolod City, prohibiting the throwing of materials in specific places and on scavenging, 2) Ordinance Nos. 4 and 1 of Olongapo City, fixing fees for the collection of waste from residential buildings and establishments, and prescribing rates for garbage collection, respectively. In essence, supplementation of LGU policies will help RA 9003 in policy enforcement and in changing behavioral patterns.

Devising market-based incentives, not just to identify markets but also to provide them for recycled materials, recovered re-usable wastes, and compost fertilizers.

F. Funding of Solid Waste Management

The initial operating expenses of Twenty Million Pesos (P20, 000,000.00) will be appropriated from the organizational adjustment fund, which will be allocated, to the National Solid Waste Management Commission, the National Ecology Center, and the LGUs.

In the long term, it is projected that its annual budget shall be appropriated from the General Appropriations Act. However, the government is now experiencing a budgetary crisis, as manifested by the ballooning budget deficit. According to our country's financial managers, achieving a

budget surplus is still far down the road. Therefore, this law faces the possibility of missing out on its needed appropriations.

Alternative sources of funds must be sought. The Commission should recognize the possibility and start developing measures towards this end. The LGUs who shoulder the bulk of the expenses for implementation also need to establish funding mechanisms for their solid waste management plans.

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